# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/901,918 | 07/09/2001 | Ken Fernald | CYGL-24,692 | 7118 |

| | | | |
|---|---|---|---|
| 25883 | 7590 | 06/15/2004 | EXAMINER |

HOWISON & ARNOTT, L.L.P
P.O. BOX 741715
DALLAS, TX  75374-1715

ANDERSON, MATTHEW D

| ART UNIT | PAPER NUMBER |
|---|---|
| 2186 | |

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/901,918 | FERNALD, KEN |
| | Examiner | Art Unit |
| | Matthew D. Anderson | 2186 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _24 May 2004_.

2a)☒ This action is **FINAL.**        2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-7_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-7_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _09 July 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _10_ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There does not appear to be support for the lower logical address portion not having lock bits. Figure 11 clearly shows both portions (1102 & 1104) of memory 1106 containing lock bits. Also, there does not appear to be support for portions with lower logical memory addresses being erased before portions with higher logical addresses. In fact, no sequence of erasure can be found by the Examiner. The Examiner asks the Applicant to provide support for these limitations.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.     Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hotley (US Patent

# 5,442,704).

5.     With respect to claim 1, Hotley discloses:

storing in a location in memory a plurality of lock bits, each associated with a separate

logical portion of the memory space and determinative as to the access thereof for a

predetermined memory access operation thereon, as shown by the lock bits (item 54a) for each

row (54b) of the memory array in figure 4;

detecting a request for access to a desired location in the memory space for operating

thereon, as shown in figure 6b;

comparing the requested memory access operation with the associated lock bit in the

associated logical portion and determining if access is allowed for the requested memory access

operation, and performing the requested memory access operation if allowed, as shown by

protection determination and ensuing  execution starting in step 626 in figure 6b.

6.     With respect to claim 2, Hotley discloses the operation being a read of an addressable

location, as recited in column 9, lines 2-6.

7.     With respect to claim 3, Hotley discloses the operation being a write of an addressable

location, as recited in column 9, lines 2-6.

8.     With respect to claim 4, Hotley discloses the operation being an erase of the associated

logical portion of an addressable location therein, by teaching in column 9, line 25, of a block

erase operation.

9.     With respect to claim 5, Hotley discloses:

storing the plurality of lock bits in a variable location in the memory and storing the lock

bit in a known location in the memory, as shown by one lock bit being stored for each row of

memory in figure 4;

in the step of comparing, the location of the lock bits is first read for m the memory and

then the lock bits are read from memory, by teaching in column 13, lines 24-35, that each step

instruction causes the middle address bits stored in the address latch counter 30-3 to be

incremented by one for readout of the next lock bit location LMB1, then contents of the location

LMB1 is compared with the key bit presented by ACP 10 which is the first key bit of the

sequence to be compared.

10.     With respect to claim 6, Hotley discloses the predetermined operation being an erase of

the lock bits, by teaching in column 11, lines 10-15, that when a block is erased, all of its data

including the lock bits stored in the lock storage area are set to ONEs.

11.     With respect to claim 7, Hotley discloses the operation of erasing the lock bits requires

that each of the lower logical portions with lower logical addresses and not containing lock bits

to be erased before the top most portion with higher logical addresses that contains the lock bits,

by teaching in column 14, lines 15-20, of an erase being performed on the block designated by

the most significant bits contained in the counter.


### *Response to Amendment*

12.     In response to the amendment filed 5/24/04: claims 1, 5, and 7 have been amended.

## *Response to Arguments*

13.     Applicant's arguments filed 5/24/04 have been fully considered but they are not

persuasive.

14.     From the arguments in page 5 of the response, the Examiner is unclear if the Applicant is

arguing that the validation procedure of Hotley enables access for *all* operations to the block, or

whether the validation enables access to the entire memory, and not just the block.

As for the latter, Hotley states in column 4, lines 58-60, that he provides an independent

lock for each block of memory.

As for the former, the claims do not distinguish that memory block can be specifically

locked for reads, or locked for writes, or locked for erases, while being unlocked for the other

operations. Although "predetermined" precedes "memory access" in the claims, that term does

not signify a *type* of access. In other words, one could "predetermine" that *no* access or *any*

access can operate on the memory block. As such, the lock bits and validation procedure of

Hotley, which allow (or disallow) all operations on the block are sufficient to read upon the

claims.

## *Conclusion*

15.     Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

16.     The prior art made of record on form PTO-892 and not relied upon is considered

pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider

these references fully when responding to this action. The documents cited therein teach similar

access limiting systems.

17.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew D. Anderson whose telephone number is (703) 306-

5931. The examiner can normally be reached on Monday-Friday, 2nd Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Kim can be reached on (703) 305-3821. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9306 for regular

communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Matthew D. Anderson
June 10, 2004